

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/112617 A1

(51) International Patent Classification⁷: **A61B 17/062** (74) Agent: SHINSUNG PATENT FIRM; 2F, Line Bldg., 823-30 Yeoksam-dong, Gangnam-ku, Seoul 135-080 (KR).

(21) International Application Number:
PCT/KR2004/001545

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 25 June 2004 (25.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(30) Priority Data:
10-2003-0042017 26 June 2003 (26.06.2003) KR

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

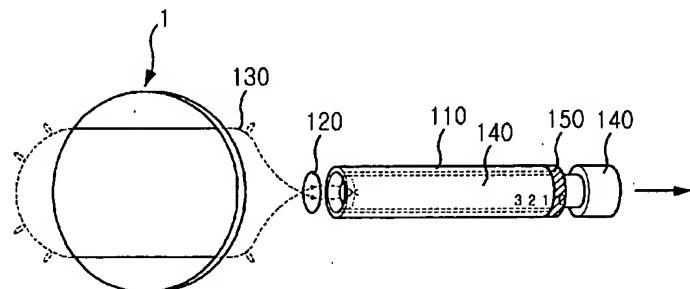
(71) Applicant and

(72) Inventor: LEE, EUI TAI [KR/KR]; #104-402, Lucky Apt., Daehyeon-dong, Seodaemun-gu, Seoul 120-757 (KR).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): KIM, Hee Chan [KR/KR]; #1-1302 Sindonga Apt., 44 Myeongil 2-dong, Gangdong-gu, Seoul 134-786 (KR). KIM, Hwa Ryoung [KR/KR]; #210-201, Hanjin Apt., Donam 2-dong, Seongbuk-gu, Seoul 136-753 (KR).

(54) Title: WOUND CLOSURE ASSISTING AND MAINTAINING APPARATUS



WO 2004/112617 A1 pulling the loop suture in order to tighten the threaded loop suture; a housing member for housing the pulling member and making the loop suture tightened by transformation of a pulling force to a wound tightening force when pulling member pulls the loop suture out of skin; and a locking member for fixing a position of the pulling member to maintain the tightened status.

(57) Abstract: Provided is a wound closure assisting and maintaining apparatus that can be attached to a wide open wound of a patient and can stretch skin around the wound gradually to achieve the wound closure and maintain the wound closure during most critical postoperative period. The apparatus includes: a loop suture being threaded through skin; a tightening member for gathering both ends of the threaded loop suture at one point and for exerting a pressure of wound tightening force evenly on skin; a pulling member for